REMARKS

Claims 1, 3-10 and 12-24 are pending in this application. By this Amendment, claims 1, 3, 5, 10, 12-14, 16, 18 and 21-24 are amended for clarity and claims 2 and 11 are canceled without prejudice or disclaimer. Various amendments are made to the claims for clarity and are unrelated to issues of patentability. No new matter is added by these amendments.

I. Objection to Drawings

The Office Action objects to the drawings under 37 C.F.R. §1.83(b) because the drawings are incomplete. In particular, the Office Action appears to state that applicant should when possible show an improved portion from an old machine. Applicant respectfully submits that the pending figures show the claimed features and the claimed features are simply an improvement of an old machine. Applicant's invention is not an improvement of "an old machine" and therefore the conditions of 37 C.F.R. §1.83(b) have been met. Various claimed features may be known in the prior art. However, the claimed features are more than an improvement on an old machine. Thus, applicant believes that 37 C.F.R. §1.83(b) has been fully satisfied. Should Examiner Ponomarenko desire any specific drawing changes, applicant would be more than willing to provide them. Item 2 on page 2 of the Office Action does not address any specific features relative to the pending drawings. Withdrawal of the objection to the drawings is respectfully requested.

II. Objection to Disclosure

The Office Action objects to the disclosure under 37 C.F.R. §1.71 because the specification is so incomprehensible as to preclude a search by the examiner. Applicant respectfully submits that the specification is very clear and adequately satisfies 35 U.S.C. §112, first paragraph. As such, no specification amendments have been provided (especially since the objection relates to broad subject matter already set forth in the disclosure). Applicant will address the specific items listed in the Office Action with respect to at least one example embodiment described in the specification. Other embodiments are also within the scope of the present invention. Based on this explanation, applicant respectfully submits that the disclosure is clear, proper and sufficient. Since all the subject matter is clearly set forth in the specification, no specification amendments have been made.

Since the Office Action specifically identifies five elements/systems, applicant will also address these five elements/systems. Applicant will gratefully provide any other desired information upon request.

A. Magnetic Ring 170

As water rises, a magnetic ring 170 may rise due to the rising water (i.e., tidal water). The magnetic ring 170 is a ring around an outside of a containment tank 110 (i.e., around side walls 112 of the containment tank 110). The ring 70 may contain a plurality of powerful neodymium magnets in block form. See paragraph [34] explicitly describing "[t]he ring 170 may...ride up and down the exterior of the containment tank 110 based on the rise and fall of the tides."

The magnetic ring 170 is magnetically sealed/coupled to a piston plate diaphragm 140 located within the containment tank 110. The diaphragm 140 may have a metallic ring around an edge that is influenced by a magnetic field (from the magnetic ring 170). Thus, the rising magnetic ring 170 may raise the diaphragm 140 (within the containment tank 110) based on the rising water outside of the tank 110. See paragraph [40], for example. Paragraph [48] also provides a very clear description of features according to one embodiment.

B. Water Entering and Exiting the Tank

A valve mechanism 150 has an inflow side 152 and an outflow side 154. See Fig. 2. As the diaphragm 140 is lifted by the ring 170, a vacuum is created within the tank 110 thereby drawing water through an inflow side 154 of a valve mechanism 150. The water exits from an outflow side 152 of the valve mechanism upon the falling of the tide. See, in particular, paragraph [40], lines 4-9. See also paragraph [49] describing the water entering. Fig. 6 also shows an outflow point 502 and an inflow point 504 for the tank 110. See paragraph [38] for a further description.

C. Vacuum Created In Tank

The valve mechanism 150 has an inflow side 152 and an outflow side 154. As stated above, the rising of the diaphragm 140 within the tank 110 causes a vacuum. This draws water through the valve mechanism 150 and through a turbine 160. See, in particular, paragraphs [40] and [31]. See also dependent claims 3 and 4.

D. System and Ocean Relationship

As described in paragraphs [26]-[29], a tidal generator system may be seated to a base 10. For example, the tidal generator system according to one embodiment may be provided on a pedestal, such as the base 10. The base 10 may be provided in a cavity dug at a beach where the ocean rises/falls and/or in a harbor where water rises/falls.

E. Structure and Operation of Systems

Applicant respectfully submits that the above description should adequate answer the Office Action's questions relating to the "operation of major features" as requested in the Office Action (third last paragraph on page 3). While not necessary, applicant is providing the following additional information to aid the Patent Office. This information is merely provided to aid in understanding the invention and therefore is not intended to limit the scope of claims. In other words, the following information is not related to issues of patentability.

The tidal generator structure is a tank with accessories to generate electrical energy. The tidal generator system may sit on a hydraulic pedestal, whose vertical movement may be activated by an electronic signal as emitted by NOAA that, for example, indicates tidal levels through satellite transmission around the world. These signals cause the pedestal to seek a daily low tide line. See paragraph [14], for example, describing these features (including a leveling system). Paragraph [33] also discusses the features of a leveler system. See also, for example, dependent claim 8.

The pedestal may be affixed on a permanent base that is located in an area either dug into the sand on a beach or and inland waterway connected with the ocean adjacent to the ocean, for example.

Inside the tank a piston diaphragm may be provided. This piston diaphragm may be affected by a magnetic coupling to an outside neodymium magnet that is encased in a floatation jacket. As described at paragraph [32], a center magnetic block array may be used. The flotation jacket rises and lifts the magnetic collar with it, also raising the diaphragm inside the tank, thus creating a vacuum. The vacuum created draws water through a base inlet valve as the water is drawn and in turn turns a turbine. The turbine may be designed to turn in only one direction no matter in which direction the water is flowing, so as the tide ebbs, and the flotation collar descends (because of its weight) it causes the magnetically coupled diaphragm to force the water back through and out of the tank.

III. Rejection Under 35 U.S.C. §112

The Office Action rejects claims 1-24 under 35 U.S.C. §112, first paragraph, as failing to comply with the enablement requirement. The rejection is respectfully traversed.

The Office Action specifically states that the rejection is in regard to the enablement requirement. However, the Office Action then states that features such as "ring mechanism," "valve mechanism," or platform tidal operation are not supported in the specification. Therefore, applicant believes that the intended rejection may be based on the written description requirement, rather than the enablement requirement. However, in an effort to further prosecution, applicant will address both written description and enablement issues.

The original claims recited a ring mechanism. That is, as is previously recited with respect to claim 2, for example, the ring mechanism may include both a magnetic ring and a plate diaphragm. Applicant has specifically addressed above how these features operate. See Section II(A). Further, each of independent claims 1, 10 and 21 are amended to specifically relate to a ring (or magnetic ring) and a diaphragm (or plate diaphragm). The specification clearly describes a ring 170 and a diaphragm 140 in a sufficient manner to enable one skilled in the art to make and/or use the claimed features.

The Office Action states that the claimed "valve mechanism" as no antecedent basis in the specification. Applicant respectfully submits that the present application and, in particular, Figs. 2 and 6 and their corresponding descriptions show a valve mechanism 150 having an outflow side 152 and an inflow side 154. See paragraph [31] describing features relating to the valve mechanism 150. Paragraph [40] also provides details on the inflow side 154 and the outflow side 152. Paragraph [38] also relates to Fig. 6's outflow point 502 and inflow point 504. Thus, applicant respectfully submits that the specification adequately describes the claimed "valve mechanism" features and that one skilled in the art would be enabled to make and/or use these features.

The Office Action also appears to address "platform tidal operation." However, the pending claims do not specifically recite these features and therefore applicant is unsure of the intent of the Office Action. Applicant respectfully submits that the claims do recite "tidal actions." Applicant respectfully submits that the specification adequately describes tidal actions as the rising and/or falling of ocean water, for example, and that one skilled in the art would be enabled to make and/or use the invention relating to these features (i.e., the claimed tidal action).

For at least the reasons set forth above, applicant respectfully submits that the claimed features have proper antecedent basis and satisfy all requirements of 35 U.S.C. §112, first paragraph. Withdrawal of the rejection is respectfully requested.

IV. Prior Art Rejection

The Office Action rejects claims 1-24 under 35 U.S.C. §102(b) by U.S. Patent 5,374,850 to Cowen. The rejection is respectfully traversed.

Independent claim 1 recites a containment tank, a magnetic ring provided about said containment tank to rise and fall based on tidal actions and a plate diaphragm provided within the containment tank. Independent claim 1 also recites a valve mechanism that allows a liquid to pass into the containment tank and to pass out of the containment tank, and a turbine/generator system to generate electrical energy based on the liquid passing through the valve mechanism.

Cowen clearly does not teach or suggest these features. That is, Cowen has no suggestion for the claimed containment tank, magnetic ring and plate diaphragm. See Cowen's Figs. 6A-6C and corresponding description at col. 4, beginning at line 36. More specifically, Cowen does not teach or suggest a magnetic ring provided around a containment tank to rise and fall based on tidal actions. At best, Cowen merely discloses a floating structure 16 and a base 12. Additionally, Cowen does not teach or suggest a plate diaphragm provided within the containment tank. Accordingly, independent claim 1 defines patentable subject matter at least for these reasons.

Independent claim 10 recites a containment tank, a ring provided outside the containment tank, a plate diaphragm provided in the containment tank to rise or fall based on movement of the ring, a valve system to pass water based at least on tidal actions, and a turbine/generator system to generate electrical energy based on the water passing through said valve system. For at least similar reasons as set forth above, Cowen does not teach or suggest these features. More specifically, Cowen does not suggest the claimed ring and/or plate diaphragm. Accordingly, independent claim 10 defines patentable subject matter at least for these reasons.

Additionally, independent claim 21 recites moving an outer ring about a containment tank based on tidal actions of water, moving a diaphragm within the containment tank based on movement of the outer ring, allowing water to pass through a valve system based on movement of the diaphragm, and generating electrical energy based on the water passing through the valve system. For at least the reasons set forth above, Cowen does not teach or suggest these features. Accordingly, independent claim 21 defines patentable subject matter at least for these reasons.

For at least the reasons set forth above, each of independent claims 1, 10 and 21 defines patentable subject matter. Each of the dependent claims depends from one of the independent claims and therefore defines patentable subject matter at least for this reason. In addition, the dependent claims recite features that further and independently distinguish over the applied reference.

CONCLUSION

In view of the foregoing, it is respectfully submitted that the application is in condition for allowance. Favorable consideration and prompt allowance of claims 1, 3-10 and 12-24 are earnestly solicited. If the Examiner believes that any additional changes would place the application in better condition for allowance, the Examiner is invited to contact the undersigned attorney, **David C. Oren**, at the telephone number listed below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this, concurrent and future replies, including extension of time fees, to Deposit Account 16-0607 and please credit any excess fees to such deposit account.

Respectfully submitted,
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